

the Arizona grasses almost pass beyond belief. No cultivated hay retains the rich and juicy qualities of grama dried and cured by the sun. Cattle like it as well in winter as in summer and keep fat on it one season as well as another. This grass is found growing from one end of Arizona to the other, and is the principal food for cattle in the Territory. The quality of beef made from it is unequaled for tenderness and flavor. No such meat is raised anywhere in the United States. Here the climate is most favorable for the stock-raiser's calling. No blinding snow storms, no Texas northers, no intense cold rob him of half his profits. Arizona has been well called the stock-grower's paradise, and there is no region in the United States that better deserves the name. There is no country where the labor and expenses are so light or where the profits are so high ; there is no country where the percentage of loss is so small or where the percentage of increase is greater, and there is none where a fortune can be more quickly realized."—pp. 257-259.

MR. LEMON ON ARIZONA AS A GRAZING COUNTRY, AND THE CONSTRUCTION OF RESERVOIRS.

Mr. J. G. Lemon, the botanist, writing recently of the resources of the great central plateau of Arizona, especially in the region traversed by the Atlantic and Pacific Railroad, says "it is believed that no other country in the world is possessed of such wealth of

grazing lands as are found on this plateau. Nutritious grasses, thick, and often two or three feet high, abound in the valleys and amid the trees of the great forest, while shorter and more tufted, but just as rich and abundant, clothe all the other portions of the plateau at lower levels, especially in the broad Juniper Belt, which entirely surrounds the great forest, and which, in fact, composes the greater part of the plateau." Of the water supply he writes: "While it is well known that springs and so-called 'tanks' or sink holes in stream-beds, are everywhere dispersed at convenient intervals—and of these more can be readily developed by intelligent effort in many places—yet there is at present a comparative scarcity of water. This scarcity serves a similar purpose as the *mal pais* in keeping animals quietly at home, and hence it greatly diminishes or entirely obviates the expenses of herding. An instance was cited where a stock-raiser easily cares for over 1000 head without assistance. Stock-men find that one herder can care for five times as many animals in such regions as where water is so abundantly, and equally distributed, for the herder has only to visit the watering places for his stock instead of searching over the whole country. Still there are certain districts lying idle because they are entirely destitute of water, except in winter and midsummer. In these localities enterprising natives are boring artesian wells, and the day is not far distant when the construction of reservoirs, in favorable gulches, or the connecting of certain cañons and valleys into lakes, will be found a profitable investment of capital."

RICHTHOFEN ON CATTLE RAISING.

Richthofen, the author of the compact little treatise upon cattle raising at the West, says: "The immense profits which have been universally realized in the western cattle business for the past and which will be increased in the future, owing to the more economical methods pursued, so long as ranges can be purchased at present prices, may seem incredible to many of my readers who no doubt have considered the stories of the fortunes realized as myths, yet it is true that many men who started only a few years ago with comparatively few cattle are now wealthy, and, in some cases, millionaires."

"The climate of the West is the healthiest on the earth; the pure high mountain air and dry atmosphere are the natural remedies, or rather preventives against sickness amongst cattle, in general, and against all epidemic diseases in particular, for nowhere in the Western States does one find any traces of pleuro-pneumonia, foot or mouth and such like contagious diseases."

CLIMATE OF THE PIEDMONT RANGE.

The climate of the Piedmont Range is regarded as particularly favorable for stock. Although it may be classed as amongst the southern ranges its general elevation tempers the heat of summer, and cattle do not suffer as in the tropics or on the plains of Texas. It is more equable and there are not such violent extremes between winter and summer. The winter

is extremely favorable and is conducive to a large and rapid increase of cattle. It is well known amongst cattle men that the percentage of loss amongst calves is less on southern ranges than on the northern. It does not exceed two per cent. on the western ranges, and increases to three per cent. in the north. Fewer winter-born calves will be lost in Arizona than on the more eastern ranges of the Rocky Mountain region.

INCREASE OF STOCK.

It is usual to estimate the increase of stock upon a basis of eighty per cent. of the cows dropping one calf each year; that is, for every one hundred cows eighty calves may be expected yearly. It is estimated, also, that forty per cent. of heifers will bear calves the second year, but it is not desirable that they should commence bearing until the third year.

The natural increase upon the basis of 80 per cent. is surprising. For example, the increase from 100 cows in ten years, without allowing for loss, amounts to 2,856; about half the number being steers. The figures are given in full by Richthofen (p. 76), but they require a reduction of three per cent. annual loss, and a further reduction, for the reason that cows will not average more than eight calves in ten years. There cannot be a better illustration of the fact that stock-raising is a cumulative and growing business; in strong contrast with the exhaustive processes of agriculture and of mining. It is a profitable business. With a good range, of large extent,

the increase is constant and rapid, in geometrical progression, from which only small reductions for loss are to be made if intelligent care is exercised.

PROFITS OF STOCK-RAISING.

Experience has shown that the business is generally extremely profitable, and many examples might be adduced. Several are given in the treatise already referred to, pages 67-71. A profit of twenty-five per cent. per annum is regarded as the least the cattle business should yield. It is stated that banks will loan more money to a cattleman in proportion to his investment, and at a lower rate of interest, than to merchants. Richthofen presents in Chapter XIV, full details of the increase and the profits to be derived from stock-raising upon a certain plan with an investment of \$250,000, of which, however, \$80,000 is supposed to be invested in land for a range. He would take Texas stock, and good grade Durham or Hereford bulls, and he figures the profits at the end of six years, as follows:—

Summary and Financial Statement, showing the status of investment at the end of six years.

STOCK ON HAND.

Value of live stock on hand	\$377,360
Cash on hand, as per cash books	8,060
Real estate, fifty per cent. advance	120,000
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Total value of all property	\$505,420
Deduct capital stock	250,000
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Surplus	\$255,420

Add to this:—

Dividends, first year, 7 per cent.	\$17,500
Dividends, second year, 7 per cent.	17,500
Dividends, third year, 10 per cent.	25,000
Dividends, fourth year, 10 per cent.	25,000
Dividends, fifth year, 10 per cent.	25,000
Dividends, sixth year, 10 per cent.	25,000
	<hr/>
	\$135,000
Surplus and cash dividends in six years being 156 per cent. on invested capital.	\$390,420

INCREASING VALUE OF STOCK RANGES.

In respect of the value of a stock range it should be stated, that in such a region as that in central Arizona flanking the mountains and without a natural supply of water, the land will not be needed or desired for agriculture. It is not adapted by nature to anything but grazing, and the first occupants controlling the water will continue to hold and enjoy the range without interference with others. Such a broad range as the Martinez, with the others added to it, and the pipe-line stations for water, will increase in value yearly, especially as the surrounding country becomes settled and the mines are opened and worked, which last, alone, will make a greatly increased demand for beef cattle. It will not be long, also, before Prescott will be united by rail with the Gila and Salt River Valley, and in this event the road must pass over or very near the Piedmont range, thus not only giving cheaper access and transportation for supplies and beef-cattle, but giving, also, cheap trans-

portation to the range of some portion of the vast crops of alfalfa raised around Phoenix, which can, at times, be used to advantage for choice stock.

This belt of country covered by the Piedmont Cattle Range lies beyond and between the series of land sections taken up by the Atlantic and Pacific and the southern Pacific, and is not therefore subject to claims or interference by either of these railway companies.

ACCESS TO THE PIEDMONT RANGE.

The Piedmont Stock Range can be reached from Prescott on the north or Phoenix on the south. From Prescott by way of Stanton's, the distance by wagon road is about fifty miles, and from Phoenix the distance by way of Wickenburg is about eighty miles, over an easy road, nearly level for most of the way. A branch of the Atlantic and Pacific Railway will be extended to Prescott this season, and the date is not distant when a railway will connect Prescott with Phoenix and the Southern Pacific Railway of Arizona.

REFRIGERATOR TRANSPORTATION.

The refrigerator system of transportation will soon supersede the transportation of cattle on the hoof, and make it possible to ship with as little cost from this range as from any other in Arizona. The peculiar purity and dryness of the atmosphere of that region offer unusual advantages for the preparation of a superior article of dried or "jerked" meat, for

which there would be a broad and ever increasing market, not only in the West but in the Atlantic States and cities, and on shipboard.

STOCK LAWS OF ARIZONA.

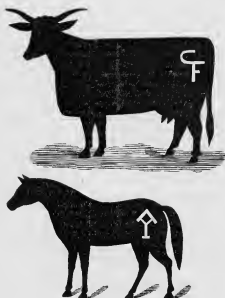
The Stock Laws of the Territory of Arizona are very complete and favorable to the industry of stock-raising. There is a special "Act for the Protection of Live Stock Growers," with heavy penalties for the infringement of their rights. Additional protection and encouragement to stock-raising is given by the various "Stock Growers' Associations," one of which is organized for Yavapai County. Its object is stated in Section II, as follows: "The object of this Association is to advance the interests of stock growers and dealers in live stock of all kinds, and for the protection of the same against frauds and swindlers, and to prevent the stealing and driving away of horned cattle, sheep, horses, and other stock from the rightful owners thereof, and to enforce the stock laws of the Territory of Arizona."

The county is divided into ten districts, each being entitled to one representative in the meetings of the Association. The Martinez Ranch is included in District No. 9, comprising Date Creek, Martinez, Weaver, People's Valley, Lower Hassayampa and vicinity.

PIEDMONT BRAND.

The brand adopted by Mr. J. R. Frink, and purchased with the cattle and the range by the Piedmont

Cattle Company, is the letter F on the left hip, and for horses on the left hip as shown in the annexed cuts. These brands are duly recorded in accordance with the Act, in the office of the County Recorder.



LIST OF SOME OF THE VALUABLE GRASSES
AND HERBAGE WHICH GROW UPON THE
PIEDMONT STOCK RANGE.

1. *Black Grama Grass*.—The best possible feed for stock in that region.
2. *White Grama Grass*.—A valuable grass, very nutritious.
3. *Coarse Bunch Grass*.

4. *Fine Bunch Grass*.

5. *Buffalo Grass*.

6. *Gyetta Grass*.—An important grass.

7. *Antelope Grass*.—A short but very heavy top grass or plant with many seeds.

8. *Six Weeks Grass*.—Cut and used as hay. It comes up after the summer rains, and covers the entire range, making it look like a meadow. It cures as it stands into excellent hay, and it is very nutritious, and the seed are very fattening both to cattle and hogs. It remains good and nutritious until the winter rains.

9. *Wild Rye*.—A coarse grass with a tall stem and feathery top.

10. *Alfileria*.—A species of "clover," better for fattening stock than the finest clover. This plant is spreading rapidly over the surface of the Martinez Ranch, and it is very important and valuable for feed, and cattle are extremely fond of it.

11. *Leguminous Plant*, or "weed," a rapid grower and much liked by cattle.

12. *Mezquite*.—This well-known leguminous tree belonging to the acacia family is a valuable addition to the food plants of that region, as the cattle not only browse upon the young limbs and foliage, but the abundant crop of mezquite beans gives feed for stock equal to grain in its effect. It is as nutritious almost as barley or corn when mature. It grows abundantly in the lower lands along the course of streams, or on low lands where there is permanent water at no very great depth.

DESCRIPTION
OF
THE PIEDMONT STOCK RANGE

IN
MARICOPA, YAVAPAI AND YUMA COUNTIES

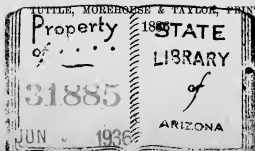
ARIZONA TERRITORY

WITH OBSERVATIONS UPON THE ADVANTAGES OF ARIZONA AS A
STOCK-RAISING REGION

BY
WILLIAM P. BLAKE
...

NEW HAVEN

TUTTLE, MOREHOUSE & TAYLOR, PRINTERS



In addition to these plants there are many unknown to science upon which cattle browse and feed. During, and just after the winter rains, the whole surface of the country becomes covered with herbage and flowers in great variety and abundance.

THE PIEDMONT CATTLE COMPANY.

The Piedmont Cattle Company has acquired the stock ranges of the Piedmont region between the range of General Crook and the Hassayampa. It is the purpose of the Company to distribute water in pipes from the reservoir of the Walnut Grove Water Storage Company over portions of the surface for the purpose of increasing the number of cattle on the range.

The Company has issued a series of six per cent. sinking-fund Bonds, which are secured by a mortgage on the property of the Company, the principal and interest being payable at "The Farmers' Loan and Trust Company," New York City. The Bonds are now offered for sale. Further information respecting the same may be obtained at the offices of

DILLINGHAM & NEWBERY,

Bankers and Brokers,

11 Wall Street, New York.

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THE PIEDMONT STOCK RANGE,

ARIZONA TERRITORY.

The central portion of Arizona, midway between the low and hot valleys of the Pacific slope and the higher ranges of mountains, is especially well adapted to stock raising. It is free from the great extremes of heat and cold, and is a much more fertile and grassy region than is generally supposed by those who have traversed the territory only by rail through the more arid and barren regions, where the most favorable grades for the road could be found.

The middle slope, or the *Piedmont* region, is suitable by climate and grasses to the business of stock-raising.

This Piedmont region of Arizona skirts the southwest side of the chief mountain region of the Territory—a portion which lies at the foot of the mountain ranges between Prescott and the great valleys of the Salt River, the Gila and the Colorado. It consists of broad sloping plains and table lands descending from the abrupt declivities of the mountains towards the lower plains and the extended valleys, where now great cities are rapidly growing up in the

midst of the fertile lands formerly occupied by the gentle Aztec races.

The extent of this Piedmont region is measured by thousands of square miles. Its general direction is northwest and southeast, its boundary on the northeast being the mountain ranges which stretch continuously from the Colorado River and Williams' Fork southeastward to the southeastern corner of the Territory. Its general elevation may be considered to be from 2,500 to 3,500 feet above the sea.

The portion to which attention is now especially directed lies to the west and northwest of the Hassayampa River, above the town of Wickenburg, extending towards Bill Williams' Fork and the Colorado River valley, a stretch of country from twenty to thirty miles or more in breadth and one hundred miles or more in length. This is a great region, almost without population, and unbroken by a fence or any extended cultivation. It is a region, however, of bunch grass and other nutritious mountain grasses upon which live stock will thrive and fatten. The great drawback heretofore has been lack of water. Every available source of this great essential of life has been secured and utilized for stock-raising purposes, for which the climatic and other conditions are unusually favorable.

The streams descending from the mountains are few and scanty in their supply, and in the dry season do not extend far from the deep gorges in the hills. Their value, however, in the midst of such an extended area of grazing land early arrested the atten-

tion of cattle men, and locations were made upon them. One of the earliest and most valuable of these locations was made by Mr. J. R. Frink, one of the pioneers of Arizona, in 1863, upon Martinez Creek, and is known as the

MARTINEZ RANCHO,

or Frink's. This is one of the oldest, if not the first, cattle rancho location made in Arizona. It has permanent, sweet water, in a flowing stream coming from the granitic ranges. It was selected as a most desirable spot by Martinez, a Mexican pioneer, and chosen by Frink as the very best location he could find for stock-raising purposes. He has occupied it successfully up to the present time, and has raised great numbers of cattle and horses upon it. The feeding ground extends each way from the water, which drains into and sinks below the surface of the "Hassayampa Wash" extending to near Wickenburg. There is feed along this wide open valley for eighteen miles to the Hassayampa, or twenty-seven miles to a point where the water runs permanently above the surface.

Mr. Frink, last March, had about 1,200 head of cattle on this range; 600, by estimate, being cows and heifers. He estimated the increase this year at 400 head, and at last accounts from there he had already branded 225 calves and expected to brand fully 200 more. 300 were branded last year. There are also some 60 fine blooded horses upon the place.

The improvements consist of a ranch house, barn, stable, sheds and a corral, besides a small V-flume for conducting the water to a reservoir below the house, and an enclosed garden, a peach orchard and a field of alfalfa which is doing very well, being supplied by the excess of water from the watering-troughs. The water in this creek flows for a long distance over a broad bed of granular granite debris, or granite sand, and a large amount is lost by soaking away in this porous soil. It is proposed to remedy this by building a small dam and to take the water from the reservoir so formed, in a pipe, to a distance of five miles or more and establish another watering station by which the grazing capacity of the ranch, or range, will be greatly increased.

The elevation at the house is about 3,000 feet above the sea. It is six miles west of Barney Martin's at Antelope Station. This range extends in a northern and western direction without any settlement or resident for nine miles to Date Creek, another stream descending from the mountains. A stock range has been selected at this place by General Crook and his friends. Crook's ranch thus adjoins the Martinez on the west.

BARNEY MARTIN'S STATION.

At Barney Martin's, in the valley leading from the mountains where Antelope Station is located, on the stage road from Phoenix to Prescott, and a short distance below Stanton's and Stanton Post-office,

there is another supply of water available for stock. There is also an extensive slope with considerable bunch grass growing so thickly as to give a decided color to the surface. This slope extending from Antelope Station to the Hassayampa River is an excellent stock range alone. Its length is about ten miles, and its area cannot be much less than one hundred square miles. The distance from Barney Martin's to the river at Wickenburg is seventeen and one-half to eighteen miles, and the fall or descent is about 1,300 feet.

This range lies between the Martinez, or Frink's, and the low hills and slopes which border the Hassayampa River located as placer ground by the Bates Brothers, and now the property of the Walnut Grove Water Storage Company.

The acquisition of the Martinez range and Martinez Creek, together with Barney Martin's range and the supply of water, these, together also with the control of the lands along the Hassayampa give a stock range of unusual extent and value, admirably located, and capable of sustaining many thousands of cattle and horses.

But its capacity and value will be largely increased and its area will be greatly extended by the introduction of water in pipes from the dam and conduits of the Walnut Grove Water Storage Company. Water conducted from the lower end of the Company's ditch can be taken in pipes over an immense area which is now lying without water beyond the reach of cattle on the ranges with their present supply of water.

By taking the water westward along the slope of the land in a suitable pipe and establishing watering stations at proper intervals the immense stretch of country can be utilized and be made to sustain herds of cattle and horses.

The configuration of the country is such that water will flow across it by gravity, pumping will not be required.

OPINION OF ENGINEER WILTON.

Mr. Edward H. Wilton, Civil Engineer of Prescott, Arizona, and United States Mineral Surveyor, reported in June, 1883, his opinion of this section of the country as a cattle range. He says: "Lying adjacent to and westward of the placer ground of the Hassayampa there stretches a section of country extending to the Colorado River, a distance of over eighty miles in length and with an average width of at least thirty miles, or an area of about 1,500,000 acres. Every foot of this is covered at all seasons of the year with a luxuriant growth of nutritious grasses for stock grazing purposes. This entire scope of country, capable of sustaining thousands of live stock, is at the present time entirely worthless and unoccupied owing to the fact that there are no living streams or springs of water on it. Water can be taken from the pipe-line in small pipes over this entire area of country, as the head is higher than any portion of this land. The water would control the tract of land, and by establishing watering

stations about four or five miles apart this can be made the most extensive and finest stock ranch in the world."

PATRICK HAMILTON ON ARIZONA AS A STOCK COUNTRY.

Mr. Patrick Hamilton, the statistician of Arizona, who has prepared the best work yet printed upon its varied resources, writes as follows of the great natural advantages of the Territory for stock growing :

" While other western States and Territories boast of their grazing resources, their rich grasses, salubrious climate, and fine water, Arizona possesses more natural advantages for stock growing and offers more inducements to those who wish to engage in it than any portion of the United States. Her ranges are of vast extent. Of the 114,000 square miles which constitute her area it is safe to say that 60,000, or more than one-half, are excellent grazing lands. Valley, plain, mountain and mesa are alike carpeted with the rich, sweet and succulent grasses peculiar to this Territory. Black and white grama, bunch and mezquite grasses are the principal varieties. On the Colorado plateau they attain a strong and vigorous growth. After the summer rains—which usually begin in July and end in August—plain and hillside become a rolling sea of living green. The grass shoots up with wonderful luxuriance, and myriads of wild flowers lend a charm to the landscape. The fattening qualities of